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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,398	02/11/2005	Soichi Kuwahara	075834.00506	6054
33448	7590	11/19/2007	EXAMINER	
ROBERT J. DEPKE			LEBRON, JANNELLE M	
LEWIS T. STEADMAN			ART UNIT	
ROCKEY, DEPKE & LYONS, LLC			PAPER NUMBER	
SUITE 5450 SEARS TOWER			2861	
CHICAGO, IL 60606-6306			MAIL DATE	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/524,398

Applicant(s)

KUWAHARA ET AL.

Examiner

Jannelle M. Lebron

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 2-11, 14, 15 and 17-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 12, 13 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 02/11/05, 01/26/06, 08/27/07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 2-11, 14, 15 and 17-19 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 09/27/2007.
2. Applicant's election of Invention I in the reply filed on 09/27/2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 12, 13 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Eguchi et al. (US 2004/0036723).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

5. Regarding claim 1, Eguchi et al. discloses a liquid ejection apparatus having a line head [10 in fig. 21] arranged by juxtaposing a plurality of liquid ejection parts of unit heads [1 in fig. 21] so as to connect the unit head to the adjacent unit head [paragraph 0006; as seen in fig. 21], each unit head having at least part of the liquid ejection part for ejecting ink droplets from a nozzle [1a in fig. 21; paragraphs 0008 and 0128], the liquid ejection apparatus comprising:

principal control means [main controller in fig. 6] for controlling each of the liquid ejection part to eject liquid droplets from the nozzle [paragraph 0096];

auxiliary control means [sub operation controller in fig. 6] for controlling liquid droplets to be ejected in at least one direction different from the ejection direction controlled by the principal control means in the arranging direction of the liquid ejection parts [paragraphs 0096 and 0097]; and

auxiliary control execution determining means [ejection control circuit 50] for individually setting whether the auxiliary control means is executed for each of the unit head [paragraphs 0096 and 0129-0140].

6. Regarding claim 12, Eguchi et al. discloses a liquid ejection apparatus wherein the liquid ejection part comprises:

a liquid chamber [ink tank ; paragraph 0072] for accommodating liquid to be ejected;

bubble generating means arranged within the liquid chamber for generating bubbles in liquid contained in the liquid chamber by supplying energy [paragraph 0072]; and

a nozzle-forming member [nozzle sheet 17] having nozzles [18] formed thereon for ejecting liquid contained in the liquid chamber in operatively associated with generation of bubbles [paragraph 0069], and

wherein the auxiliary control means controls liquid droplets to be ejected in a direction different from that of liquid droplets ejected by the principal control means by supplying energy to the bubble generating means in a different way from that of the principal control means [paragraph 0096].

7. Regarding claim 13, Eguchi et al. discloses a liquid ejection apparatus wherein the liquid ejection part comprises:

a liquid chamber [ink tank ; paragraph 0072] for accommodating liquid to be ejected;

a heating element [resistor 13] arranged within the liquid chamber for generating bubbles in the liquid contained in the liquid chamber by supplying energy [paragraph 0072]; and

a nozzle-forming member [nozzle sheet 17] having nozzles [18] formed thereon for ejecting liquid contained in the liquid chamber in operatively associated with generation of bubbles [paragraph 0069], and

wherein a plurality of the heating elements are juxtaposed in the one liquid chamber in the arranging direction of the liquid ejection parts, and are connected together in series [paragraph 0078 and 0096; as seen in figure 21], and

wherein the auxiliary control means comprises a circuit having a switching element [transistors] connected between the heating elements connected together in series [paragraphs 0108 and 0111; as seen in fig. 6], and controls the ejection direction of liquid droplets to be ejected in a direction different from that by the principal control means by passing electric current between the heating elements through the circuit or by discharging electric current from between the heating elements through the circuit so as to control electric current for supplying to each heating element [paragraph 0096].

8. The steps of method claims 16 are deemed to be inherent in view of the functions of the apparatus disclosed above, since it would be necessary to perform the claimed method steps in order for the apparatus to perform its intended functions.

***Communication with the USPTO***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jannelle M. Lebron whose telephone number is (571) 272-2729. The examiner can normally be reached on Monday thru Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Luu can be reached on (571) 272-7663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**Jannelle M. Lebron**  
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11/10/2007



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